## A NEW VARIETY OF ERICAMERIA DISCOIDEA (ASTERACEAE) FROM IDAHO AND WYOMING

ROBERT D. DORN 8481 Road 39, Lingle, WY 82223 linglebird@yahoo.com

## CHARMAINE H. DELMATIER 29009 Oakland Hills Dr., Georgetown, TX 78628

## ABSTRACT

A new variety of *Ericameria discoidea* is described and illustrated. The variety is known from two locations in southeast Idaho and southwest Wyoming. It resembles *E. discoidea* var. *linearis* but has broader leaves that lack the glands that are usually present in var. *linearis*.

Key Words: Idaho, Wyoming, Asteraceae, Ericameria.

In September of 1995, the junior author collected a plant specimen in Lincoln Co., Wyoming, that was identified by Ronald Hartman as *Haplopappus macronema* A. Gray var. *linearis* (Rydb.) Dorn [now *Ericameria discoidea* (Nutt.) G. L. Nesom var. *linearis* (Rydb.) G. L. Nesom]. Of the known taxa, this was the closest match, but the senior author suspected that it might represent an undescribed taxon based on apparent leaf differences, a quite different habitat, and its disjunct location from the two varieties of *E. discoidea*.

In March 2002, Alma Winward, U.S. Forest Service Regional Ecologist in Ogden, Utah, showed the senior author a collection that he had made in Bear Lake Co., Idaho, in August of 1985, and asked what it might be. It appeared identical to the collection discussed above.

On 26 July 2002, the senior author visited both collection sites to observe the populations in the field and make additional collections. After comparing these collections with collections of var. *linearis* and contrasting the habitats, he concluded that a new variety is justified.

Ericameria discoidea (Nutt.) Nesom var. winwardii Dorn & Delmatier, var. nov.—TYPE: USA, Wyoming, Lincoln Co., ca. 11 mi SW of Kemmerer, 41°42.471'N, 110°43.381'W, 2135 m (7000 ft), 26 Jul 2002, *R. Dorn 9393* (Holotype, RM, Isotypes BRY, COLO, MO, NY, IDS.

Differt a var. *linearis* foliis latioribus, latissimis (2.5)3–5 mm latis, brevioribus, dense pubescentibus, et eglandulosis.

Prostrate to erect shrub 0.5-2 dm high; stems densely floccose-tomentose; leaves alternate, petioles very short or mostly lacking, the blades mostly narrowly oblanceolate or elliptic, 6–15 mm long, the largest (2.5)3–5 mm wide, less than six times as long as wide, loosely floccose-tomentose, eglandular; heads cymose, involucre turbinate to campanulate, 10–12 mm long and 3–4 mm wide, with about 12 bracts in usually two series, these lancelinear or linear-oblanceolate, the outer loosely tomentose, all more or less spinulose-tipped; receptacle naked; rays none; disk flowers 4–9, corolla ca. 9 mm long, the tube ca. 3 mm long, the limb ca. 4.5 mm long, the lobes 1–1.5 mm long and often hairy at least at tip; pappus of 40 or more capillary bristles, 8–9 mm long but with some shorter bristles intermixed, slightly tawny; anthers ca. 3 mm long; style glandular-hairy, ca. 8 mm long excluding the ca. 2–2.5 mm long, linear branches; achenes 5–7 mm long, pilose with ascending hairs



FIG. 1. *Ericameria discoidea* var. *winwardii*. A. Habit. B. Leaf. C. Flower.



FIG. 2. Distribution of *Ericameria discoidea* varieties based primarily on specimens at RM and USFS. One symbol may represent more than one collection locality.

(Fig. 1). Barren clay-shale slopes and silty clay outwash from whitish outcrop, slopes mostly less than 20°, 2070–2135 m (6800–7000 ft) elevation. Preuss Range, Bear Lake Co., Idaho, and South Fork Twin Creek drainage, southern Lincoln Co., Wyoming.

*Paratypes.* USA. Idaho, Bear Lake Co.: Snowslide Canyon 10 mi NE of Montpelier, 1 Aug 1985, *A. Winward s. n.* (Winward Herb.); Crow Creek Road ca. 9 air mi NE of Montpelier, 42°23.757'N, 111°09.348'W, 2070 m (6800 ft), 26 Jul 2002, *R. Dorn 9396* (BRY, COLO, MO, NY, RM). Wyoming, Lincoln Co.: ca. 8.2 air mi SW of Kemmerer, T20N R118W S23 E 1/2, 1 Sep 1995, *C. Refsdal* 7759 (RM).

The three varieties of *Ericameria discoidea* are distinguished as follows.

- 1. Leaves oblanceolate (elliptic), the largest 3–7 mm wide, glandular-pubescent, margins often crisped or wavy; Oregon and California e to sw Montana, Utah, and Colorado ..... var. discoidea
- Leaves narrowly oblanceolate to elliptic or linear, the largest 1–5 mm wide, glabrous to glandularpubescent or floccose-tomentose, margins flat; sw Montana, se Idaho, and w Wyoming

- Leaves mostly linear, six or more times as long as wide, the largest 1–2.5(3) mm wide, glandular-pubescent or rarely glabrous, sometimes floccose-tomentose but still usually glandular; sw Montana and nw Wyoming ..... var. *linearis*
- 2. Leaves narrowly oblanceolate to elliptic, less than six times as long as wide, the largest (2.5)3–5 mm wide, floccose-tomentose and eglandular; se Idaho and sw Wyoming .... var. winwardii

Compared to var. *winwardii*, in the field var. *discoidea* and var. *linearis* are usually taller with the tomentum of the stems contrasting more sharply with the foliage. The leaves of var. *discoidea* are noticeably the broadest with usually wavy or crisped margins while the leaves of var. *linearis* are usually noticeably the narrowest. One might justifiably recognize var. *discoidea* as a species distinct from the other two taxa. Specimens from Fremont County, Wyoming, at RM suggest a closer relationship between var. *linearis* and var. *winwardii*. Varieties *discoidea* and *linearis* usually occur from 2285 to 3960 m (7500 to 13,000 ft) elevation but a few collections are from as low as 1830 m (6000 ft). These are mountain plants often occurring on

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coarse soils along streams and lakes. Variety *winwardii* occurs between 2070 and 2135 m in the dryer foothills and out into the basins but where the finer clay soils hold moisture and/or where extra runoff provides additional moisture. Their distributions are mapped in Figure 2.

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